

Title (en)
Textile fabric with reduced soiling properties

Title (de)
Textile Flächengebilde mit geringer Anschmutzneigung

Title (fr)
Structure textile plane avec une faible tendance à l'encrassement

Publication
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Application
EP 02017662 A 20020806

Priority
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Abstract (en)
Flax structured textiles of low soiling tendency and good self-cleaning power which are not lost under mechanical loads can be achieved by the use of coatings containing at least 50 wt.% of finely divided particles unsuitable for film formation of a material (M), in which 80 wt.% of the particles are of diameter 0.5-100 micro m, and sufficient polymer binder as matrix builder. Flax structured textiles including a flax textile carrier and at least one coating on the carrier from (wt.%) at least one finely divided material (M) (50-80) in which 80 wt.% of the particles have a diameter of 0.5-100 micro m, and a matrix (20-50) including: (I) at least one fluorine-free conventional polymer binder (B); (II) at least one fluoroorganic polymer (FP) or a mixture of this with a hydrophobic wax, where the F content of component (II) is at least 1 wt.%; and (III) optionally adjuvants in amount up to 10 wt.% relative to the matrix, and the weight ratio of component (I) to component (II) is 1:2 to 100:1. Independent claims are included for: (1) a process for preparation of the textile material including application of at least one aqueous coating composition to a textile carrier and drying of the carrier, where the aqueous coating composition contains (wt.%) at least one finely divided material (50-80) in which 80 wt.% of the particles are of diameter 0.5-100 micro m and a matrix component (20-50 wt.%) including: (i) F-free polymer binder (B) in aqueous dispersion; (ii) a fluoroorganic polymer or a mixture of this with a wax, where the F-content of component (ii) is less than 1 wt. % as an aqueous dispersion; and (iii) optionally adjuvants in amount up to 10 wt.% on the matrix, where the weight ratio of binder (B) to component (ii) is 1:2 to 100:1; (2) a coating composition containing (wt. %) at least one finely divided material (50-80) in which 80% of the particles are of diameter 0.5-100 micro m, and a polymer component including: (a) at least one F-free polymer binder (B), in the form of an aqueous dispersion; (b) at least one fluoroorganic polymer (FT) or a mixture of this with a hydrophobic wax, where the F-content of component (b) is at least 1 wt.%, in the form of an aqueous dispersion; and (c) water and optionally up to 10 wt.% of binder (B), and conventional adjuvants, where the weight ratio of binder (B) to component (b) is 1:2 to 100:1; and (3) a two-component coating composition including a first aqueous coating composition containing at least one finely divided material in which 80 wt.% of the particles are of diameter 0.5-100 micro m, at least one F-free polymer binder (B) as an aqueous dispersion, water, and up to 10 wt.% of adjuvants relative to binder (B).

Abstract (de)
Textiles Flächengebilde, umfassend einen flächigen textilen Träger, und wenigstens eine auf dem Träger angebrachte Beschichtung, die aufgebaut ist aus: 50 bis 80 Gew.-%, bezogen auf das Gesamtgewicht der Beschichtung, wenigstens eines feinteiligen Materials M, worin 80 Gew.-% der Teilchen einen Durchmesser im Bereich von 0,5 bis 100 µm aufweisen und 20 bis 50 Gew.-%, bezogen auf das Gesamtgewicht der Beschichtung, eine Matrix, umfassend: i) als Komponente i wenigstens ein fluorfreies, konventionelles polymeres Bindemittel B, ii) als Komponente ii) wenigstens ein fluororganisches Polymer FP oder eine Mischung davon mit einem hydrophoben Wachs, wobei der Fluorgehalt der Komponente ii wenigstens 1 Gew.-%, beträgt, iii) gegebenenfalls Hilfsstoffe in einer Menge von bis zu 10 Gew.-%, bezogen auf die Matrix, wobei das Gewichtsverhältnis von Komponente i zu Komponente ii im Bereich von 1:2 bis 100:1 liegt.

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